

## Abstract

[0025] The present invention is directed to an arrangement and a method for eye examination and/or for determining biometric eye data in which the movement of the eyes is compensated through the use of an eye tracker unit. The arrangement comprises a controllable digital illumination unit and an observation system which are arranged on separate supporting arms. A central control unit has connections to an image recording unit, an optical imaging system, an eye tracker unit and an output unit. Further, transmitter elements and/or actuating drives are provided at the separate supporting arms, at the zoom system and at the magnification changer. The examination can be adapted in an optimal manner to the task at hand by means of the structured illumination patterns that can be generated in a variable manner. Detection of all adjusting parameters relevant for recording can be used for calculations and for reconstructing the pertinent observation conditions. In case of repeated examinations for determining changes, e.g., during the recovery process following eye surgery, the regions can be found again in a simple manner and examined under exactly the same conditions.